UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|---------------------------------|----------------------|---------------------|------------------|
| 10/770,881 | 02/03/2004 | Haihong Zheng | 873.0140.U1(US) | 1059 |
| | 7590 05/01/200 N & SMITH, PC | | EXAMINER | |
| 4 RESEARCH | DRIVE, Suite 202 | | HUSSAIN, TAUQIR | |
| SHELTON, CT 06484-6212 | | | ART UNIT | PAPER NUMBER |
| | | | 2452 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 05/01/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | Application No. | Applicant(s) | | | |
|--|--|--|-----------------------|--|--|--|
| Office Action Summary | | 10/770,881 | ZHENG ET AL. | | | |
| | | Examiner | Art Unit | | | |
| | | TAUQIR HUSSAIN | 2452 | | | |
| Period fo | The MAILING DATE of this communication app or Reply | ears on the cover sheet with the c | orrespondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) | Responsive to communication(s) filed on <u>04 Fe</u> | ahruary 2009 | | | | |
| • | | action is non-final. | | | | |
| = | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| ٥,١ | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Dispositi | on of Claims | | | | | |
| · · · | | the application | | | | |
| - | Claim(s) <u>1-8,10,11 and 16-33</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| | | | | | | |
| · | 5) Claim(s) is/are allowed. | | | | | |
| · · | 6) Claim(s) 1-8,10,11 and 16-33 is/are rejected. | | | | | |
| • | Claim(s) is/are objected to. Claim(s) are subject to restriction and/o | r election requirement | | | | |
| اـــا(٥ | ciain(s) are subject to restriction and/o | r election requirement. | | | | |
| Applicati | on Papers | | | | | |
| • | The specification is objected to by the Examine | | | | | |
| 10) | The drawing(s) filed on is/are: a)☐ acc | epted or b) \square objected to by the ${	t E}$ | Examiner. | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority ι | ınder 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 2) Notice (3) Inform | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ite | | | |

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DETAILED ACTION

Response to Amendment

1. This office action is in response to amendment /reconsideration filed on 02/04/2009, the amendment/reconsideration has been considered. Claims 1-8, 10-11 and 16-33 are pending for examination, the rejection cited as stated below.

Response to Arguments

- 2. Applicant's arguments filed on 02/04/2009 have been fully considered but they are not deemed to be persuasive. In the remarks, applicant argued in substance that
 - (a) Prior art "Venkitaraman and Takahashi" does not teach, "any operations in relation to a link layer address of a mobile network node" or "any binding updates that are sent to an access network" or "based on the second neighbor advertisement, constructing a second neighbor cache in the AR that associates the CoA with the LLA_MR".
 - (b) Prior art "Venkitaraman and Takahashi" does not teach, "use of a mobile router" or "the presence of a mobile network having one or more intermediate nodes" or "use of a mobile router, such as one wherein at least one mobile node is behind a mobile router with both being part of a mobile network" or "the access node list includes any information for the mobile node" or "CoA list be sent or transmitted to any other component or device".
 - (c) Applicant argue that independent claims 16, 21, 25, 29,32 and 33 claims the feature similar to claim 1, however scope of these claims are not identical to that of claim 1.

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(d) Applicant argues that limitation disclosed in claim 3, 5 and 10 is different than limitations disclosed in claim 1 of the instant application which includes the key feature of, "constructing a mapping table that associates the CoA with one of a set of LLAs of the MR (LLA MRi).

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As to point (a), Prior art "Venkitaraman and Takahashi" teaches a link layer address of a mobile network node as suggested in Takahashi, Fig.4, where access node option header 60D includes a link layer address in a mobile network, it is further noted that, link layer address is obvious in any mobile network since it is the first step of communication between two devices or two network. Takahashi further discloses a binding updates as depicted in Fig.11, step-A08 transmits BU to register binding between PCoA and HoA with MAP. Takahashi further discloses, "based on the second neighbor advertisement, constructing a second neighbor cache in the AR that associates the CoA with the LLA_MR", [Fig.4, 0066], MAP 50 gets the request to send the access node list when mobile node changes MAP 50 with which the binding of its own is registered and as shown in Fig.1 any time device changes the cell the configurations are updated and transmitted to MAP 50 and similar mapping of CoA with the LLA MR is disclosed in paragraph [0061] as explained in last office action.

As to point (b), Examiner respectfully disagree, prior arts, "Venkitaraman and Takahashi" teaches, "user of a mobile router" as disclosed in the Abstract of cited reference "Venkitaraman", where defining mobile routers detachably connected to one of ore mobile network nodes. It is further disclosed by Venkitaraman that "the presence of a mobile network having one or more intermediate nodes" Abstract, when attached to

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the mobile router, the mobile network address create a binding between their home address and a home address of their attached mobile router and it is further disclosed that bindings are updated, as appropriate responsive to movement of the mobile network to other networks. As to the argument for, "use of a mobile router, such as one wherein at least one mobile node is behind a mobile router with both being part of a mobile network", Examiner notes that there is no such language used anywhere in the claim. As for the limitation, "the access node list includes any information for the mobile node" Takahashi discloses, Fig.2, where displayed is an access node list and Venkitaraman discloses, router advertisement when changing the site and accomplished by messages termed "binding updates" and binding update list includes the mobile node addresses and therefore combining Takahashi's access node list with Venkitaraman's [0006] mobile environment makes it obvious to include the mobile node address in the access node list and in same paragraph also disclosed is when device change the site it informs their home agent of their new care of address via binding updates which means device do transmits the care of address list to other nodes.

As to point (c), Examiner noted that there is no evidence of support in remarks provided for independent claims 16, 21, 25, 29, 32 and 33 which suggest these claims are not identical to that of claim 1 and therefore, Examiner restrained to apply restriction and treated the limitations of said independent claims in light of claim 1 as same invention.

As to point (d), Examiner respectfully disagree and suggest that mapping between two different addresses are already disclosed in both the cited arts e.g.

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Venkitaraman, [0038] and Takahashi, Abstract. Therefore claiming mapping between two different set of addresses is well known in the art and used in various combinations.

Claim Rejections - 35 USC § 103

- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 4. Claims 1-8, 10-11 and 16-33 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Takahashi et al. (Pub. No.: US 2004/0218573 A1), hereinafter, "Takahashi" in view of Venkitaraman et al. (Pub. No.: US 2003/0161287 A1), hereinafter "Venkitaraman.
- 5. Takahashi and Venkitaraman have been cited as prior arts in the last office action. The teachings that applicable are respectfully maintained and incorporated by reference as set forth in the last office action.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAUQIR HUSSAIN whose telephone number is (571)270-1247. The examiner can normally be reached on 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571 272 3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. H./ Examiner, Art Unit 2452 /Kenny S Lin/ Primary Examiner, Art Unit 2452